

The New ISD BSR – What you Need to Know

July 21, 2005

Presented by: Ella Page
Software Process Improvement (SPI) Project

Purpose and Objectives

- **Purpose:** To provide an overview of the new bi-monthly MSR template reporting requirements
 - The Branch (*or Division*) Status Review (BSR)
- **Objective - After this session you should know:**
 - What information is required in a BSR
 - How to effectively present the information on BSR charts
 - Some of the dos and don'ts in preparing a BSR presentation

The ISD Branch Status Review Template

- Where can you find the BSR template?
 - Go To <http://software.gsfc.nasa.gov/ISDpalndx.cfm>
 - See Asset 1.4.3.4, ISD Branch Status Review Template
- What's in the asset?
 - Template Purpose, Scope, and Tailoring information (pages 1-2)
 - Template for preparing a BSR (pages 3-16)
 - BSR Template Guidance (pages 17-37)
- When do you have to use it?
 - Now!

■ What's in the BSR? ***

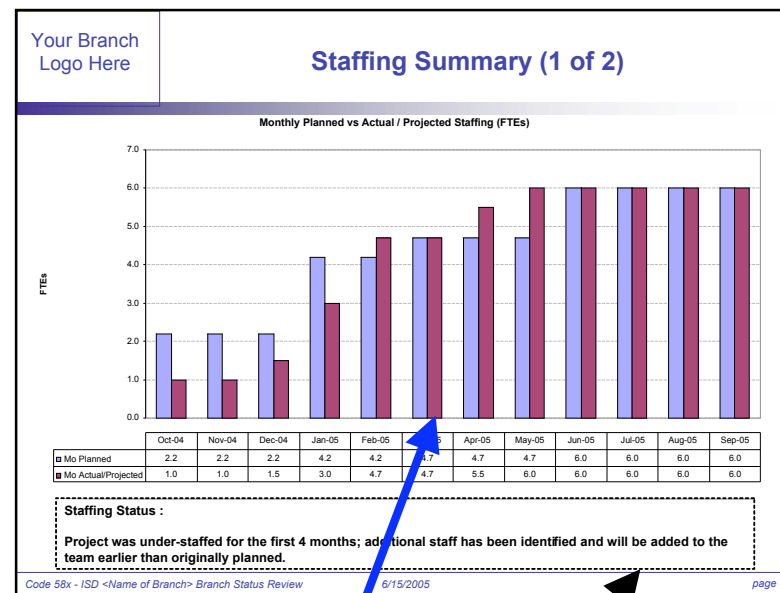
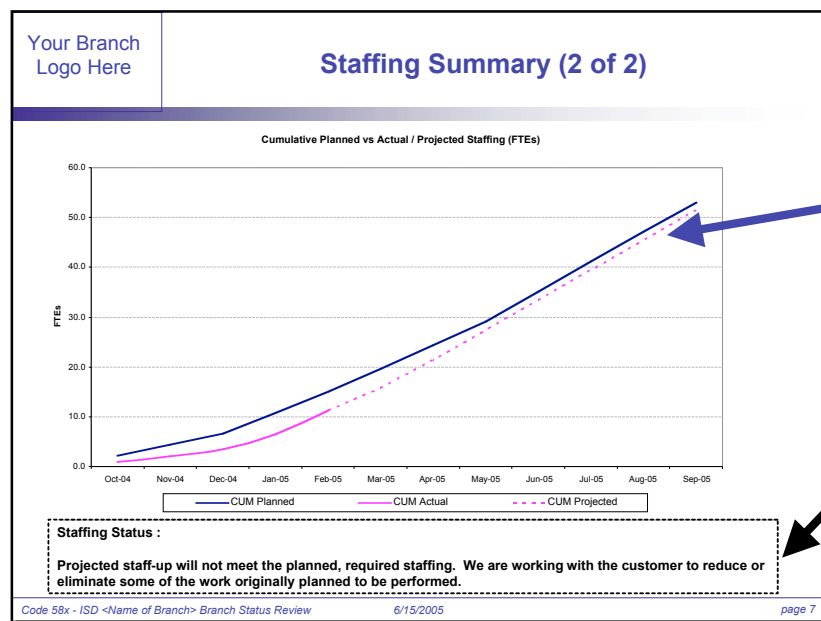
- Overall Project Status
- Project Staffing Summary and Schedule Information
- General Software Project Status
 - Accomplishments
 - Deliverables
 - Receivables
 - Commitments
- Technical and Management Issues and Concerns
- Software Project Risk Status
- Software Project Metrics

***** *This is information you should use in managing your project, so you should have all the data at hand as you create the slides.***

- Messages are the key “good” points and the key risk or problem areas

Project Staffing Summary

- *Show planned versus actual staffing*
- Planned data comes from your project plan
- Actual data comes from WebTADs for civil servants, or it comes from contractors



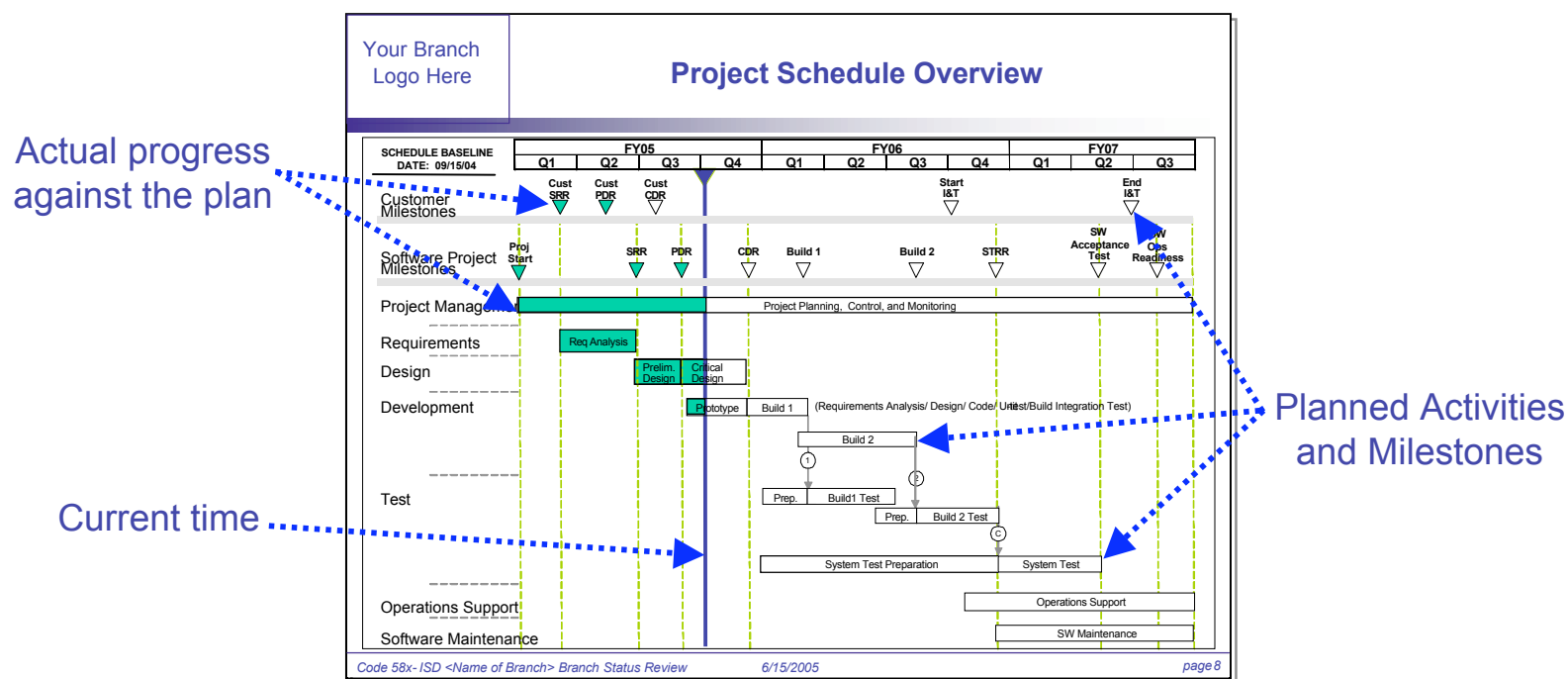
Show FTE data **monthly**,
cumulatively,
or both ways

Provide a text box with
staffing analysis*

- Identify why you have a variance (such as changes in requirements, budget).
- Identify the impact of variance
- Identify corrective actions planned or taken.

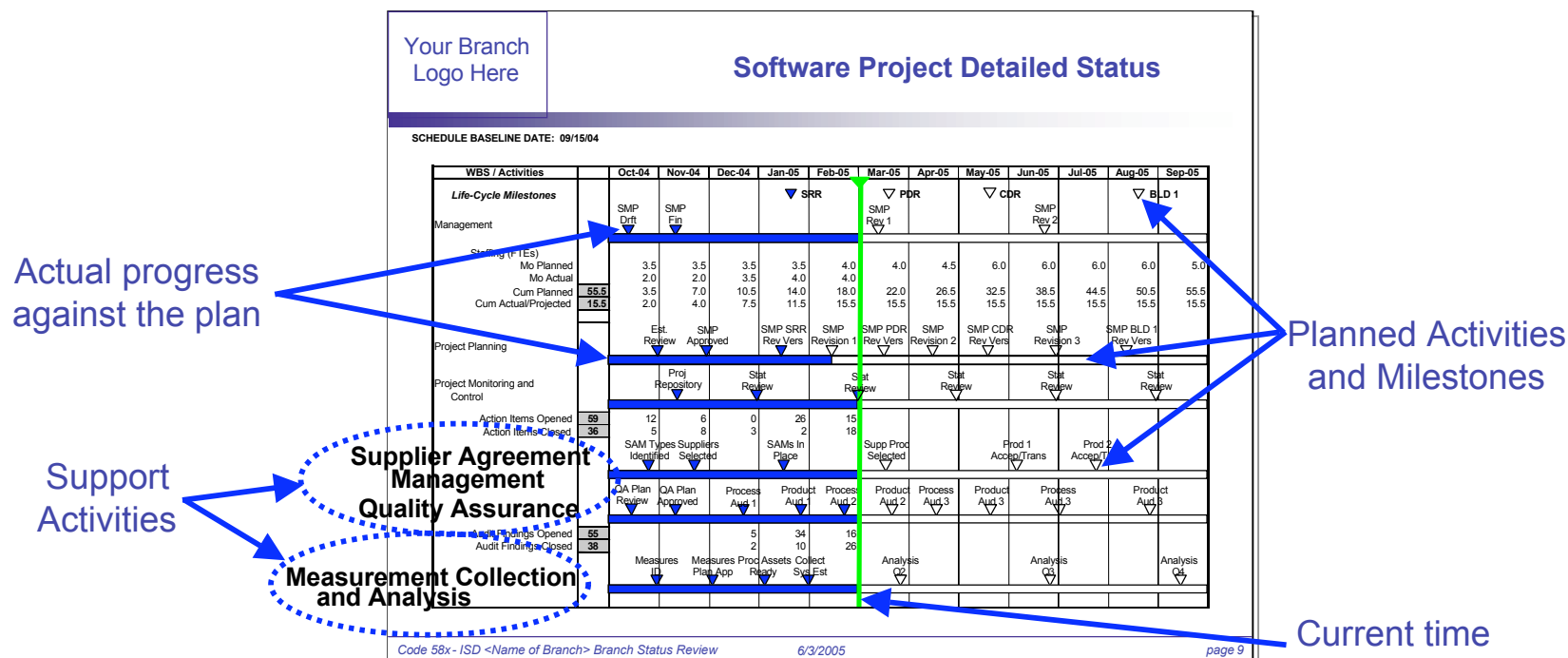
Project Schedule Overview

- *Provide an overview of your baselined schedule for major lifecycle phase activities and milestones*
- Get schedule information from your project plan
- Get progress data from your measurement activities
- Show actual progress against planned progress



Software Project Detailed Status

- Provide a more detailed schedule based on major WBS elements and milestones
- Include technical and support milestones
- Get schedule information from your software project plan
- Get progress data from your measurement activities
- Show current progress against the plan



Detailed Support Activities

- These represent the support details that should be included in your schedule
- Each support area *must* be addressed with some process activities *as appropriate to the current phase*
- Provide details of work planned and accomplished

Your Branch Logo Here		Project Detailed Status– Support Activities	
<p>Project Planning</p> <ul style="list-style-type: none"> Defined the WBS Estimated project costs Established project schedules Selected and documented the project life cycle Identified project risks Planned the budget against the schedule 		<p>Supplier Agreement Management</p> <ul style="list-style-type: none"> Determined type of acquisition Selected suppliers Established / maintained supplier agreements Reviewed candidate COTS products Worked with the supplier as specified in the supplier agreement Accepted acquired products Transitions acquired products to the project 	
<p>Project Monitoring & Control</p> <ul style="list-style-type: none"> Collected and tracked project progress Held regular monitoring meetings Prepared for and presented milestone reviews Monitored stakeholder involvement Presented issues to management Monitored and actively managed risks Tracked data management Obtained and tracked commitments 		<p>Process and Product Quality Assurance</p> <ul style="list-style-type: none"> Negotiated software assurance support with Code 300 Reviewed Software Assurance Plan Conducted process audits Conducted product audits Recorded non-compliance process / product issues Resolved non-compliance process / product issues 	
		<p>Measurement and Analysis</p> <ul style="list-style-type: none"> Defined, planned, and documented project measurement approach Obtained approval on measurement approach Defined project measures Established measurement collection repository Collected measures Analyzed and reported measures 	<p>Requirements Management</p> <ul style="list-style-type: none"> Obtained requisite commitments to requirements Developed and updated bidirectional traceability matrix Identified and resolved inconsistencies in requirements
		<p>Configuration Management</p> <ul style="list-style-type: none"> Defined, planned, and documented configuration management (CM) approach Obtained approval on CM approach Identified / documented configuration items Conducted CM Audits Held CCB Meetings Placed n items under CM control Established deliverable baseline 	
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General Software Project Status - Accomplishments

- Describe what was planned for this period
- Describe accomplishments for this period
- Describe plans for next period
- Report on technical areas, including
 - Completing products
 - Technical activities
 - Meeting milestones
 - Supporting customer events
- Report on support (i.e., process) areas, including
 - Software Project planning
 - Software Project monitoring and control
 - Supplier agreement management
 - Process and product quality assurance
 - Configuration management
 - Requirements management
 - Measurement and analysis

Sample Accomplishments Slide

Your Branch Logo Here
Accomplishments

- **Management**
 - Planned Activities
 - Establish configuration management approach
 - Obtain commitment on funding for FY05
 - Accomplishments
 - Established the CM approach and obtained Branch Management approval
 - Prepared CM Plan draft and distributed it for review by the development, test, and customer teams
 - Future Plans
 - Obtain commitment on funding for FY05
 - Deliver and obtain comments on Project Management Plan Review version
- **Development**
 - Planned Activities
 - Complete initial engineering evaluation

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Base planned and accomplished description on CURRENT reporting period only. Based future plans on next reporting period only.

Break planned work, accomplishments, and future plans out separately

or

Differentiate through text

Use short bulleted phrases

Organize based on high-level WBS

Your Branch Logo Here
Accomplishments

- **Management**
 - Established the CM approach and obtained approval from Branch Management one week later than planned
 - Prepared CM plan draft and distributed it for review by the development, test, and customer teams as scheduled
 - Expected commitment on funding for FY05 was not received
 - Plans for next month:
 - Obtain commitment on funding for FY05
 - Deliver and obtain comments on Project Management Plan Review version
- **Development**
 - Complete initial engineering evaluation as scheduled
 - Started Build 1 as planned

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General Software Project Status – Deliverables / Receivables / Commitments

- List all project deliverables, receivables, and commitments
 - For the current reporting period
 - For at least the next two reporting periods (and further in the future if of particular criticality or interest (for example, deliver to I&T))
- Minimum information must include
 - Name of the deliverable, receivable, or commitment item
 - An indicator of the type of item (i.e., deliverable, receivable, or commitment)
 - Both planned and actual dates for each item

Consider using the following table to provide this information. Other formats are acceptable as long as they include the requisite information.

Deliverables / Receivables / Commitments	Type	Planned	Actual	Notes / Comments / Schedule Analysis
FY05 Funding Approved	C	10/01/04	12/15/04	Acceptable funding approved. No impact on delay of receipt of approval.
Configuration Management Plan	D	11/01/04	11/01/04	Distribution to all parties completed on schedule.
User Requirements	R	01/15/05		

Issues and Concerns

- **Address the software project's issues and concerns including, at a minimum:**
 - A brief description of the issue/concern
 - An analysis of the issue/concern
 - Specific impact(s) on your software project
 - Specific internal and external stakeholders who are affected or should be involved in the resolution process
- **Separate technical and management issues and concerns**
 - Management issues worked by PDL and management
 - Technical issues worked by technical teams
- **Use a format that can fully describe the required items**

Issues and Concerns Suggested Format

- One Issue/Concern per slide
- Show required information:
 - A brief description of the issue/concern
 - An analysis of the issue/concern
 - Specific impact on your project
- Be sure to note where specific internal and external stakeholders are involved

Your Branch Logo Here	Management Issue
Your Branch Logo Here	Technical Issue

ID	ISSUE	ANALYSIS AND IMPACT	ACTION PLAN
1	NIRSpec Focal Plane Electronics (FPE) ETU was removed from the deliverables list due to budgetary constraints	Analysis: With no ETU hardware and no simulators there will be no high fidelity testing of the data readout. Impact: FSW will delay delivery of instrument by 3-4 months	Meet with Project to review impacts and decide on a course of action FSW to meet with NIRSpec Development Team to define a lower cost test bench for FSW Development A duplicate EU FPE can be delivered to FSW if costs deemed acceptable.

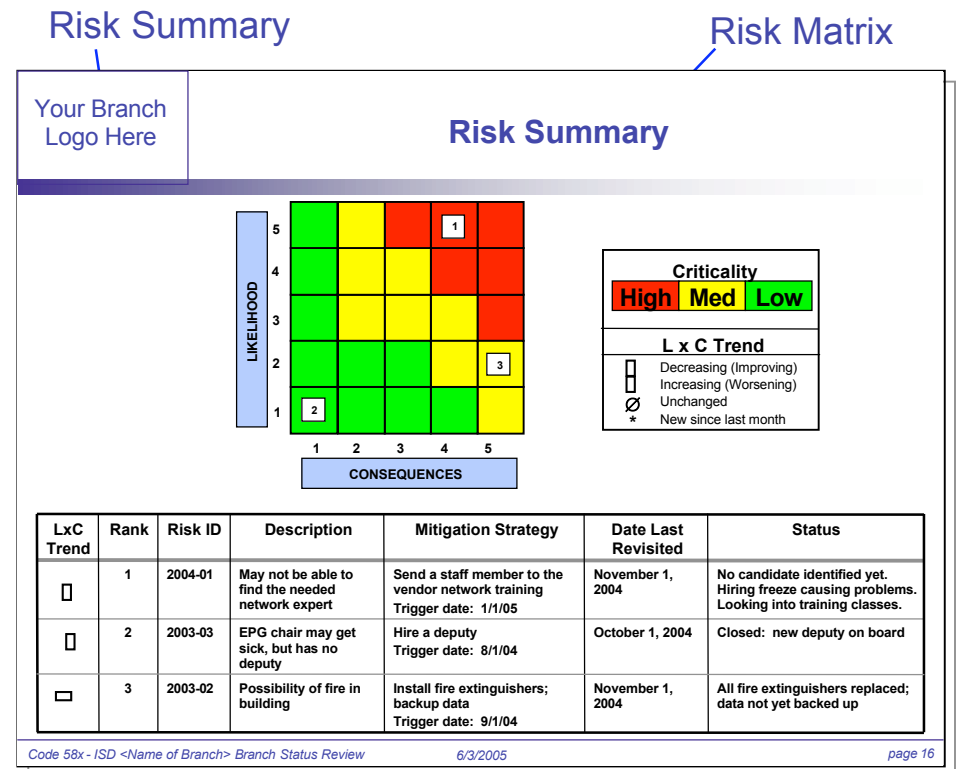
STATUS		
Progress: Received cost estimates; need concurrence from Project. When we take receipt of the FPE Test Bench remains an issue.	Scheduled Dates	
	Due Date	Completed Date
	12/15/2004	

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Software Project Risk Status

- Provide a summary of each *major* software project risk and a risk matrix
- Include, at a minimum, all “RED” risks
- Present a clear, concise statement of:
 - The risk mitigation strategy
 - Date last revisited
 - Status information such as
 - Current activities
 - Time period that risk is active
 - Event/date that triggers the risk’s mitigation

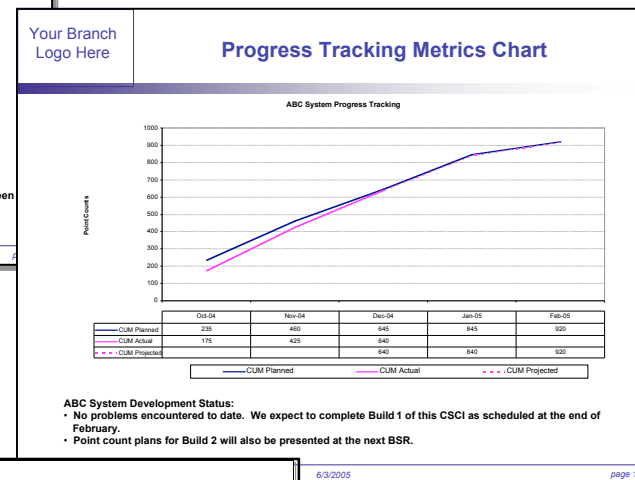
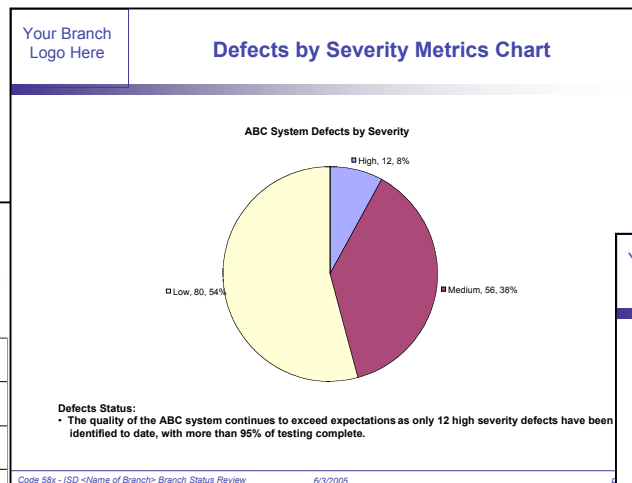
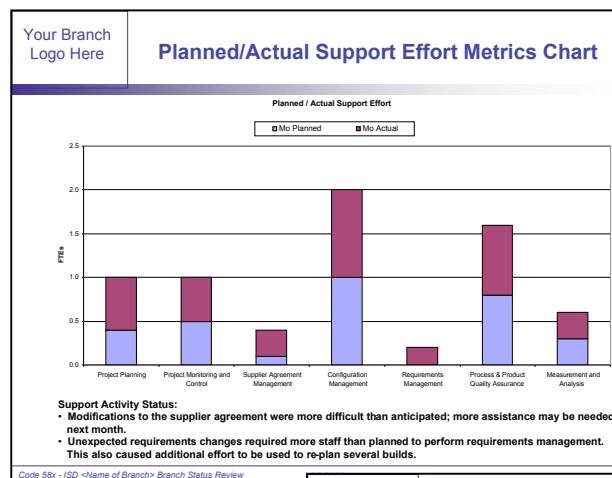
Below is a Risk Summary example. Other formats are acceptable if the requisite information is included.



Software Project Metrics

- Include slides that address all measures specific to your software project, including Risk Management Metrics
 - See <http://software.gsfc.nasa.gov/MeasProj.htm> for information on measurement for software projects
 - See <http://software.gsfc.nasa.gov/discussionslides.cfm> for Measurement and Analysis for ISD Software Projects presentation
- Use charts or graphs to show data
- Include a short analysis description

Example Slides for Project Metrics



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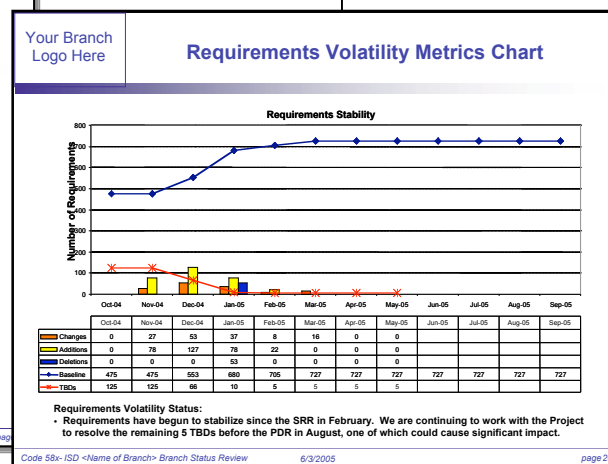
Risk Management Metrics Chart

Risk Criticality	Last Reporting Period	Current Reporting Period			Total Open Risks
		New	Modified	Retired	
High	2	3	1	1	4
Medium	4	0	0	2	2
Low	8	1	5	0	9
Totals	14	4	6	3	15

Risk Management Status:

- We opened 4 new risks during this reporting period. 3 of them are considered high criticality because they all relate to our ability to meet the Project's critical End-To-End schedule (See details on the Risk Summary Slide). We were, however, able to retire our most significant risk because the mitigation approach we implemented was successful.

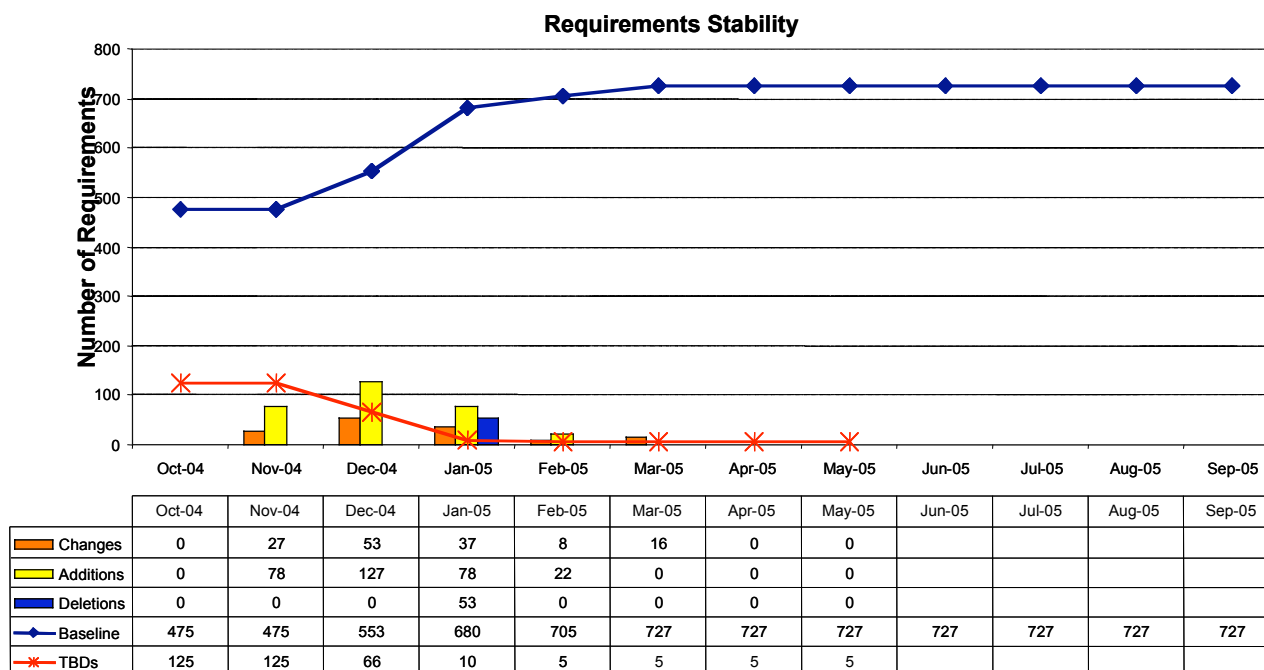
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Example Requirements Volatility Chart

Your Branch
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Requirements Volatility Metrics Chart



Requirements Volatility Status:

- Requirements have begun to stabilize since the SRR in February. We are continuing to work with the Project to resolve the remaining 5 TBDs before the PDR in August, one of which could cause significant impact.

Example Risk Metrics Chart

Your Branch
Logo Here

Risk Management Metrics Chart

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Outline of a Tailored BSR for FSW

FSW Status Summary

FSW Significant Events

FSW System Engineering Activities

FSW Schedule Overview

FSW Risks

FSW Status of documents, receivables, deliverables

FSW Staffing – Planned Versus Actuals

FSW Staffing Assignments

FSW Development and Test Teams' Status

- Accomplishments
- Detailed Schedule
- Metrics (Point Counts and other metrics)
- Issues and Concerns
- Process Monitoring

BSR Dos and Don'ts

- **Do remember to report the good news as well as the problems**
- **Do focus on the CURRENT reporting period progress and next period plans**
- **Do understand the metric data needed – collect and analyze it regularly**

- **Don't forget to report on activity (process) status as well as product status**
- **Don't report the “nitty-gritty” details – this is a management-level review**
- **Don't forget to report the problems and issues – get management help if needed**
- **Don't try to remember everything at the end of the month ... make notes along the way**

Summary

- **Make sure you present the required information**
 - Use the ISD Branch Status Review Template, Asset 1.4.3.4, as a guide
 - Use your organization's template as a guide
- **Keep your focus at a high level except for high impact issues, concerns, and risks**
- **Report progress on both technical and support activities relative to plan**
- **Collect your metric data as you go and the report will be easy to put together**
- **Analyze the metric data and understand the impact of the numbers – you need this to manage your project**
- **Use tools like Excel spreadsheets to create your charts when possible**
- **Tailor your reporting approach to the software classification and size**

Getting Help for Your BSR

- **Get help when you need it**
 - **Sally Godfrey – Software Process Improvement Manager**
 - Sara.H.Godfrey@nasa.gov
 - **Sanjeev Sharma – Software Process Improvement**
 - Sanjeev.K.Sharma@nasa.gov

Questions?

July 21, 2005 – Using the website <http://software.gsfc.nasa.gov/>

Find tools

Locate training and experts

Use approved process assets

See Engineering process group (EPG) Contacts

Get measurement info

See lessons learned

The screenshot shows the main page of the GSFC Software Development Process Improvement website. It features a navigation bar with links: + GSFC SW IMPROVEMENT, + PROCESS ASSETS LIBRARY, + TRAINING, + TOOLS, + MEASURES, and + LESSONS LEARNED. Below the navigation bar, there is a 'Welcome' section and a 'News and Upcoming Events' section. The website is titled 'GSFC Software Development Process Improvement' with the tagline 'If the Process Works...Improve It.'.

Use search function to find assets

Click asset name to get asset PDF

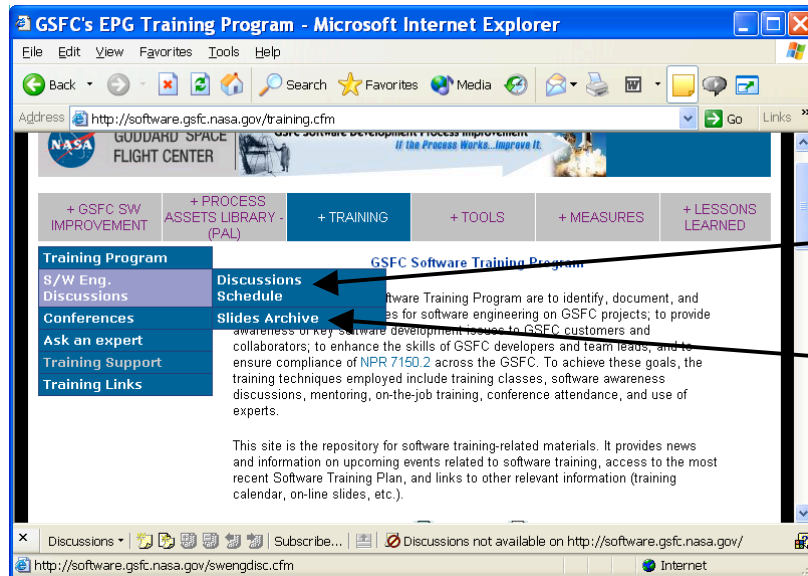
Click "?" to get feedback form

Click icons for desired files

The screenshot shows the 'Process Assets Approved' page, which displays a table of assets. The table has columns: Asset Number, Document Number, Title, Owner, Asset Type, Status (More Info), MS Office, and PDF. The table lists several assets, including 'ISD Software Policies', 'ISD Project Planning Process', 'ISD Software Project Estimation', 'Wide Band Delphi Procedure', and 'SW House Life Cycle'. Annotations point to the search function, the asset names, the feedback form icon, and the file icons.

Asset Number	Document Number	Title	Owner	Asset Type	Status (More Info)	MS Office	PDF
1.0.0.1	580-PC-002	ISD Software Policies	?	580	Policy	CCB approved	
1.2	580-PC-004-01	ISD Project Planning Process	?	580	Process	CCB approved	
1.2.1	580-SP-026-01	ISD Software Project Estimation	?	580	Guideline	CCB approved	
1.2.1.2	580-PR-016-01	Wide Band Delphi Procedure	?	580	Procedure	CCB approved	
1.2.2.1		SW House Life Cycle	?	582	Guideline	CCB approved	

July 21, 2005 – Accessing Presentation Slides From the Website



For SW Engineering Discussions ...
Click “Training” and highlight
“*S/W Eng. Discussions*”

Access SW Engineering Discussion schedule:
(<http://software.gsfc.nasa.gov/swengdisc.cfm>)

Access slides from past SW Engineering
Discussions:
(<http://software.gsfc.nasa.gov/swengdisc.cfm>)

For Other On-Line Slides...
Click “Training” and highlight
“*Training Program*”

Access slides from other
useful presentations

